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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/213,131

Filing Date: December 15, 1998

Appellant(s): ANDERSON, ERIC C.

\_\_\_\_\_  
Benjamin Withrow  
For Appellant

**EXAMINER'S ANSWER**

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This is in response to the appeal brief filed 05/08/2006 appealing from the Office action mailed 02/21/2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The amendment after final rejection filed on 02/06/2006 has been entered.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

5,270,831 Parulski et al.

5,550,938 Hayakawa et al.

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 7-9, 11-18 and 20-22 and are rejected under 35 U.S.C. 103(a) as being unpatentable over (USPN 5,270,831 to Parulski et al.) in view of Hayakawa et al. (US Patent # 5,550,938).

[Claim 7]

Parulski discloses a method for correcting an aspect ratio of an image captured by an image capture device comprising the steps of:

- (a) rotating the image, if required, so that the image appears upright on the image capture device (e.g. column 2, lines 40-45; column 3, lines 12-19; column 6, line 62 – column 7, line 2);
- (b) determining if the aspect ratio of the image matches a predetermined aspect ratio (e.g., column 7, lines 3- column 8, line 8; Figs. 5-9);
- (c) decompressing the image if required (e.g., column 4, line 60 – column 5, line 4);
- (d) cropping the image if the aspect ratio does not match the predetermined aspect ratio, thereby providing a cropped image (e.g., column 7, lines 3- column 8, line 8; Figs. 5-9);
- (e) providing the cropped image to a display (e.g., Figs. 5-9);

wherein the image capture device is a digital camera (e.g., scanner 12 of Fig. 1; column 4, lines 35-49; also note column 4, lines 26-31).

Parulski teaches a digital scanner 12 (analogous to a digital camera) and a separate playback device 14 with a display but does not teach if the digital scanner and the playback

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device are integrated into a single device. However Hayakawa et al. teaches an image scanner (figures 1 and 3) that includes a LCD display 2 for displaying scanned images and an image sensor 51 integrated into one device (col. 2 line 60-col. 3 line 1) in order to have a device that is operable anywhere and not limited by place, i.e. a place that has a host computer (col. 1 lines 58-61).

Therefore taking the combined teachings of Parulski and Hayakawa, it would be obvious to one skilled in the art at the time of the invention to have been motivated to have used the digital scanner and display device of Parulski be integrated into one device in order to have a device that is operable anywhere and not limited by place, i.e. a place that has a host computer (col. 1 lines 58-61).

[Claim 8]

Parulski discloses wherein the step of cropping the image further comprises the step of:

(d1) resizing the image (e.g., column 8, lines 29-63).

[Claim 9]

Parulski discloses wherein the aspect ratio determining step (a) further comprises the step of:

(b1) determining the aspect ratio of the image; and

(b2) determining if the aspect ratio of the image matches an aspect ratio of the display (e.g., column 7, lines 3- column 8, line 8; Figs. 5-9).

[Claim 11]

In regards to claim 11, Hayakawa discloses a LCD monitor (col. 3 line 1).

[Claims 12 and 20]

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In regards to claims 12 and 20, Examiner notes page 12, lines 11-14 of the instant invention for the definition of a scrennail image. Examiner notes column 7, lines 39-61 of Parulski wherein by providing an image that fills the visible area of the display, Parulski provides a scrennail image.

[Claim 13]

In regards to claim 13, note column 4, line 60 – column 5, line 4 of Parulski wherein iteratively higher resolution images can be displayed.

[Claim 14]

In regards to claim 14 see Examiners notes on the rejections above, wherein the same display steps for cropping the image would be applied to the higher resolution images.

[Claims 15-17]

In regards to claims 15-17 see Examiners notes on the rejections above.

[Claims 18, 21-22]

In regards to claims 18 and 21-22 see Examiners notes on the rejection of the claims above.

#### **(10) Response to Argument**

1. As indicated by the board, the Evidence relied upon section is being changed to indicate the references cited in the final office action dated 12/05/2005.
2. Appellant argues with regards to claims 7 and 22 that claims recite a digital camera and neither references teach a digital camera and Examiner's assertion regarding a scanner being analogous to a digital camera is erroneous (Page 6 of the appeal brief). The Examiner respectfully disagrees. Parulski clearly teaches photographic images, such as a set of images of a film strip 10, are scanned by a high resolution opto-electronic film scanner 12. and outputs

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digitally encoded data (e.g. a 3072.times.2048 pixel matrix) representative of the internal electronic scanning of a high resolution image sensing array onto which a respective photographic image frame of film strip is projected. This digitally encoded data, or 'digitized' image, is coupled in the form of an imaging pixel array-representative bit map (col. 4 lines 32-45). The scanner comprises at least an image sensing array (e.g. CCD) and an A/D circuit, which are the essential components of a digital camera. It is very well known to one skilled in the art that a scanner as well as a digital camera will perform the same functions of scanning a picture (e.g. a film strip as in Parulski) and digitize the analog image with an analog to digital converter.

3. Appellant argues that Examiner is trying to implicitly modify the scanner to a camera to establish a prima facie of obviousness because changing the scanner of Parulski involves modifying the reference. The Examiner respectfully disagrees. Examiner is not trying to modify the scanner of Parulski into a digital camera to establish a prima facie case of obviousness, rather only trying to establish the fact that the functionality of scanner and a digital camera is same as both these devices scan images (film strips or any objects), digitize them and process the digitized images and because of this fact the problem that the Parulski reference is trying to solve namely "comparing the aspect ratio of an image with a predetermined aspect ratio and cropping the image if the aspect ratio is not same and displaying the cropped image" is reasonably pertinent to the problem with which appellant is involved, and would have commended themselves to anyone addressing such a problem. *In re Clay*, 966 F.2d 656, 658, USPQZd 1058, 1060 (Fed. Cir. 1992). A digital scanner as in Parulski and the digital camera are within the field of the inventor's endeavor because they are both microprocessor controlled devices and both used CCD to capture an image and an A/D converter to digitize the images.

Even if they are not within the same field of endeavor, it is found that the references are reasonably pertinent to the problem with which appellant is involved, namely, “comparing the aspect ratio of an image with a predetermined aspect ratio and cropping the image if the aspect ratio is not same and displaying the cropped image”, and would have commended themselves to anyone addressing such a problem.

Applicant’s argument concerning the substitution of digital scanner of Parulski for the digital camera is without merit in that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference. Nor is the test that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to the skilled artisan. *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). In view of the foregoing, there is no impermissible hindsight or non-analogousness being used to demonstrate the obviousness of claims 7-9, 11-18 and 20-22.

4. Appellant argues that just because there are some common elements between a scanner and a digital camera does not make them the same devices (Appeal brief page 8). The examiner respectfully disagrees. A scanner and a digital camera are analogous devices because the functionality of both devices is same as both these devices scan images (film strips as in Parulski or any objects) via a CCD (Charge coupled device), digitize them (A/D converter) and process these digitized images and as explained above the problems that Appellant’s invention is trying to solve is same as Parulski reference.

5. Appellant argues that Parulski fails to teach the claimed steps of “rotating the image, if required, so that the image appears upright on a display of the image capture device” and

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“providing the cropped image to the display”. Specifically, applicant argues that because the images are provided to a separate playback device and so the images never appear upright on a display of the image capture device. The Examiner respectfully disagrees. Parulski teaches (col. 7 lines 27-38) that a conventional monitor employs a display screen with a 4:3 aspect ratio (and having 484 lines for an NTSC system), then, irrespective of the orientation of the 3:2 aspect ratio image stored in memory 50, the accessing of memory 50 will require some degree of cropping or decimation of the contents of the 512.times.768 array. The manner in which memory controller 46 controls the generation of address signals and clocks out the contents of memory 50 for a number of respectively different image types for the example of an NTSC system television monitor is illustrated in figs. 5-9. Parulski further explains in figure 5 and col. 7 lines 39-61 an image that is 512 x 768 as in memory 50 (a normal or inverted horizontal image), the size of the stored image exceeds the size of the NTSC display matrix, memory controller 46 confines its column and row output addresses to a set of boundaries that encompasses a 484 x 640 sub-matrix of addresses centered in frame 80 within memory array 50. Therefore those data entries of memory 50 that fall outside of frame 80 are not accessed for display and the associated 484.times.640 NTSC display will display a normal horizontal image of the pixels bounded by frame 80.

Similarly in figure 6, a rotated rectangular perimeter frame overlay 82 associated with a decimated sub-array portion of the 512.times.768 data entries of memory 50 on a 484.times.640 NTSC pixel matrix 84, where the contents of the image correspond to a 90.degree. rotated picture that has been slightly demagnified so that most of its vertical dimension fits within the vertical boundaries of the TV display matrix (col. 8 lines 29-36).



Parulski teaches a digital scanner 12 (analogous to a digital camera) and a separate playback device 14 with a display but does not teach if the digital scanner and the playback device are integrated into a single device. However Hayakawa et al. teaches an image scanner (figures 1 and 3) that includes a LCD display 2 for displaying scanned images and an image sensor 51 integrated into one device (col. 2 line 60-col. 3 line 1) in order to have a device that is operable anywhere and not limited by place, i.e. a place that has a host computer (col. 1 lines 58-61). Therefore the motivation to combine is explicitly recited in the Hayakawa reference.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Yogesh K Aggarwal/

April 2, 2008

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